

# INTERNAL AUDIT REPORT

2019-04

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2018 Parts, Fuel, and Chemicals Inventory

Anchorage Water and Wastewater Utility

April 25, 2019

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MUNICIPALITY OF ANCHORAGE  
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# Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

April 25, 2019

Honorable Mayor and Members of the Assembly:

I am pleased to present for your review **Internal Audit Report 2019-04, 2018 Parts, Fuel, and Chemicals Inventory, Anchorage Water and Wastewater Utility**. A brief summary of the report is presented below.

In accordance with the 2018 Audit Plan, we have completed an audit of the 2018 Parts, Fuel, and Chemicals Inventory. The objective of this audit was to determine the accuracy of Anchorage Water and Wastewater Utility's inventory records for parts, fuel, and chemicals. To accomplish our objective, we performed inventory counts based on random and judgmental samples at the King Street Operations and Maintenance Warehouse. We also inventoried chemicals at Anchorage Water and Wastewater Utility's Eklutna and Ship Creek Water Treatment Plants, and Anchorage Water and Wastewater Utility's Asplund and Eagle River Wastewater Treatment Plants. In addition, we inventoried fuel stored at Anchorage Water and Wastewater Utility's Arctic Boulevard, King Street, and Eklutna locations.

Our audit revealed that the parts inventory records for the King Street Operations and Maintenance Warehouse were reasonably accurate. Likewise, inventory records for chemicals at Anchorage Water and Wastewater Utility's Eklutna, Ship Creek, and Eagle River facilities were reasonably accurate. Similarly, fuel inventories at various facilities were reasonably accurate. However, our review found that 4 of 6 chemicals inventoried at the Asplund Wastewater Treatment Facility had discrepancies between the book balance and the inventory count.

There was one finding in connection with this audit. Management was responsive to the finding and recommendation.

Michael Chadwick, CIA, CICA  
Director, Internal Audit



# Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

April 25, 2019

**Internal Audit Report 2019-04**  
**2018 Parts, Fuel, and Chemicals Inventory**  
**Anchorage Water and Wastewater Utility**

**Introduction.** The Anchorage Water and Wastewater Utility (AWWU) maintains an inventory of parts, fuel, and chemicals. Parts, fuel, and chemicals are recorded in the inventory records using the Maximo Work Management System (Maximo) which interfaces with the SAP financial system. When inventory is expended, the expenses are recorded in Maximo and inventory receipts are recorded in SAP. According to AWWU staff, AWWU performs cycle counts for the parts stored in the King Street Operations and Maintenance Warehouse (Warehouse), fuel is measured on a monthly basis, chemicals at AWWU's treatment facilities are counted at the end of the year, and AWWU's Finance Division reconciles inventory to the SAP general ledger. AWWU maintains their own gasoline and diesel fuel tanks at the Arctic Boulevard, King Street, and Eklutna Water Treatment Plant locations.

**Objective and Scope.** The objective of this audit was to determine the accuracy of AWWU's inventory records for parts, fuel, and chemicals. Specifically, we performed inventory counts based on random and judgmental samples at the Warehouse. We also inventoried chemicals at AWWU's Eklutna and Ship Creek Water Treatment Plants, and AWWU's Asplund and Eagle River Wastewater Treatment Plants. In addition, we inventoried fuel stored at AWWU's Arctic Boulevard, King Street, and Eklutna locations.

We conducted this performance audit in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence

obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit was performed during the period of December 2018 through February 2019.

**Overall Evaluation.** Based on our test counts, the parts inventory records for the Warehouse were reasonably accurate. Likewise, inventory records for chemicals at AWWU's Eklutna, Ship Creek, and Eagle River facilities were reasonably accurate. Similarly, fuel inventories at various facilities were reasonably accurate. However, our review found that 4 of 6 chemicals inventoried at the Asplund Wastewater Treatment Facility (AWWTF) had discrepancies between the book balance and the inventory count.

## **FINDING AND RECOMMENDATION**

### **1. Chemical Variance Existed at Asplund Wastewater Treatment Facility.**

- a. **Finding.** Our review found that 4 of 6 chemicals inventoried at AWWTF had discrepancies between the book balance and the inventory count. For example, there was a shortage of 1,560 gallons of hydrochloric acid, resulting in an adjustment of -\$8,080.80. In another case, there was an overage of 4,440 pounds of sodium chloride, resulting in an adjustment of \$1,281.38. According to AWWU staff, the discrepancies were investigated; however, they were unable to definitively determine the cause of the discrepancies.
- b. **Recommendation.** The AWWU General Manager should reinforce the business processes of receiving, issuing, adjusting, and moving inventory in Maximo to ensure that inventory is properly recorded. In addition, the AWWU General Manger should consider providing additional training regarding these business processes and address the importance of timely documentation.

- c. **Management Comments.** Management concurred and stated, “The chemical variances at AWWTF were caused by a number of past practices which include the processes for inventory issuing, receiving and cycle counting.

“The issuing of chemicals at the AWWTF has been done monthly based off the difference between chemicals on hand and the Maximo balance. This methodology of issuing chemicals in Maximo will cease and a new process will be implemented.

“The receiving of chemical inventory in SAP was completed when the vendor invoice was received, not when AWWU took possession of the chemical. This causes an additional delay in updating of the chemical inventory balance in Maximo and with the current process of issuing chemicals this creates inaccurate issuances. AWWU will start the new process of receiving in SAP with the delivery ticket on the date of delivery.

“Another issue that caused the chemical inventory variance is that cycle counting was only completed once a year during the yearly audit. Due to the significant financial value of chemicals at AWWTF, AWWU will be implementing monthly cycle counting versus yearly. This will assist with locating discrepancies in a timely manner and improve the accuracy of the chemical inventory balance.

“To disseminate this information to all those involved with chemical inventory, a new procedure guide with links on instructions on goods receiving in SAP and issuing chemicals in Maximo will be communicated. This procedure guide will address the issues that have been observed of issuing, receiving, and cycle counting chemical inventory.”

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

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**Discussion With Responsible Officials.** The results of this audit were discussed with appropriate Municipal officials on March 18, 2019.

Audit Staff:  
Scott Lee